## What is Claimed:

1. A method of treating tumorous disease in a human patient by administering to said patient a human immunoglobulin specifically binding to the human EpCAM antigen, said immunoglobulin exhibiting a serum half-life of at least 15 days, said method comprising the step of administering said immunoglobulin no more frequently than once every week.

## 2. The method of claim 1, further comprising:

- (a) determining, after a period of at least one week following a respective last administration of said immunoglobulin but prior to a respective next administration of said immunoglobulin, the serum level of said immunoglobulin still present in the blood of said patient, thereby obtaining an intermediate serum level value for said immunoglobulin;
- (b) comparing said intermediate serum level value for said immunoglobulin with a predetermined serum trough level value for said immunoglobulin;
- (c) optionally repeating steps (a) and (b);
- (d) effecting the respective next administration if the intermediate serum level value for said immunoglobulin is no more than 15%, preferably 10%, most preferably 5% above the serum trough level value.
- 3. The method of claim 1 or 2, wherein the magnitude of the dose of said human immunoglobulin administered is set such that, at the end of the intervening time between two respective administrations, the amount of said human immunoglobulin persisting in the serum never drops below the predetermined serum trough level.
- 4. The method of any of claims 1 to 3, wherein said administering takes place once every two weeks or wherein said administering takes place less frequently than once every two weeks.
- 5. The method of claim 4, wherein said administering takes place once every two weeks and wherein the administered dose of said human immunoglobulin remains unchanged from one administration to the next.

6. The method of claim 4, wherein said administering takes place less frequently than once every two weeks and wherein both the administered dose of said human immunoglobulin and the frequency of administration remain unchanged from one administration to the next.

- 7. The method of claim 5 or 6, wherein the magnitude of the initial and all subsequent doses is determined by pharmacokinetic simulation.
- 8. The method of any of the above claims, wherein said administering is intravenous, intraperitoneal, subcutaneous, intramuscular, topical or intradermal.
- 9. The method of any of the above claims, wherein said tumorous disease is breast cancer, epithelial cancer, hepatocellular carcinoma, cholangiocellular cancer, stomach cancer, colon cancer, prostate cancer, head and neck cancer, skin cancer (melanoma), a cancer of the urogenital tract, e.g., ovarian cancer, endometrial cancer, cervix cancer, and kidney cancer; lung cancer, gastric cancer, a cancer of the small intestine, liver cancer, pancreas cancer, gall bladder cancer, a cancer of the bile duct, esophagus cancer, a cancer of the salivatory glands or a cancer of the thyroid gland.
- 10. The method of claim 9, wherein said tumorous disease is prostrate cancer or breast cancer and said human immunoglobulin is administered in a dosage of 1 to 7 mg per kg body weight once every two weeks.
- 11. The method of claim 10, wherein said human immunoglobulin is administered in a dosage of 2 to 6 mg per kg body weight once every two weeks.
- 12. The method of any of the above claims, wherein said human immunoglobulin comprises an immunoglobulin heavy chain with an amino acid sequence as set out in SEQ ID NO: 1 and an immunoglobulin light chain with an amino acid sequence as set out in SEQ ID NO: 2.
- 13. A human immunoglobulin specifically binding to the human EpCAM antigen, characterized in that said human immunoglobulin exhibits a serum half-life of at least 15 days after administration to a human patient.

14. The human immunoglobulin of claim 13, wherein the serum half-life is 20 days, 19 days, 18 days, 17 days, 16 days or 15 days.

- 15. The human immunoglobulin of claim 13 or 14, wherein the half-life is 15 days and said human immunoglobulin comprises an immunoglobulin heavy chain with an amino acid sequence as set out in SEQ ID NO: 1 and an immunoglobulin light chain with an amino acid sequence as set out in SEQ ID NO: 2.
- 16. A pharmaceutical composition comprising the human immunoglobulin of any of claims 13-15.
- 17. Use of a human immunoglobulin specifically binding to the human EpCAM antigen, said human immunoglobulin exhibiting a serum half-life of at least 15 days for the preparation of a medicament for treating a tumorous disease, said medicament being formulated for administration no more frequently than once every week.
- 18. The use of claim 17, wherein said medicament is formulated for administration no more frequently than once every two weeks.
- 19. The use of claim 17 or 18, wherein said medicament is formulated for administration every two weeks and, the administered dose of said human immunoglobulin remaining unchanged from one administration to the next.
- 20. The use of any of claims 17-19, wherein said medicament is formulated for administration less frequently than once every two weeks, the administered dose of said human immunoglobulin administered being set such that, at the end of the intervening time between two respective administrations, the amount of said human immunoglobulin persisting in the serum never drops below a serum trough level determined to be necessary for therapeutic efficacy.
- 21. The use of any of claims 17-20, wherein the medicament is formulated for intravenous, intraperitoneal, subcutaneous, intramuscular, topical or intradermal administration.

22. The use of any of claims 17-21, wherein the tumorous disease is breast cancer, epithelial cancer, hepatocellular carcinoma, cholangiocellular cancer, stomach cancer, colon cancer, prostate cancer, head and neck cancer, skin cancer (melanoma), a cancer of the urogenital tract, e.g., ovarian cancer, endometrial cancer, cervix cancer, and kidney cancer; lung cancer, gastric cancer, a cancer of the small intestine, liver cancer, pancreas cancer, gall bladder cancer, a cancer of the bile duct, esophagus cancer, a cancer of the salivatory glands or a cancer of the thyroid gland.